

AGENDA: MISR Science Team Meeting 2014
Kerckhoff Building, Room 119 (Norman Davidson Lecture Hall)
California Institute of Technology, Pasadena, CA

Thursday, December 11

Welcome

8:15 AM	Sign-in	All	30
8:45 AM	Welcome	David Diner	15

Atmospheric Dynamics, Clouds, and Radiation **Moderator: Eugene Clothiaux (Penn State University)**

9:00 AM	Comparison of MISR/ASCAT observations and WRF simulations of Karman vortex streets	Akos Horvath	20
9:20 AM	The Walker circulation	David Halpern	20
9:40 AM	Forecast impact of MISR winds on the GEOS-5 model	Kevin Mueller	20
10:00 AM	Aerosol-cloud interactions in ship tracks using Terra MODIS/MISR	Jean Chen	20
10:20 AM	Discussion	All	5
10:25 AM	Break	All	20
10:45 AM	Marine stratocumulus cloud-top droplet size distributions using airborne observations of supernumerary arcs and glories in polarized light	Feng Xu	20
11:05 AM	AirMSPI as fieldable sensor for comprehensive micro- and macro-physical definition of marine stratocumulus	Anthony Davis	20
11:25 AM	Comparison of MISR and MISR-simulated cloud top heights with retrievals from active sensors	Benjamin Hillman	20
11:45 AM	Regional changes in Earth's color and texture as observed from space over a 14-year period	Guangyu Zhao	20
12:05 PM	An investigation of the polarizing properties of the exoplanet HD189733 B	Pushkar Kopparla	20
12:25 PM	Discussion	All	5
12:30 PM	Lunch	All	90

Surface Remote Sensing and Modeling **Moderator: Larry Di Girolamo (Univ. of Illinois)**

2:00 PM	Assessment of MISR sea-ice BRF and albedo using NASA CAR	Jan-Peter Muller	20
2:20 PM	Monthly changes in surface roughness and reflectance as a means of classifying glacier zones on the Greenland ice sheet	Anne Nolin	20
2:40 PM	Monitoring seasonality in phenology of Amazonian rainforests using MISR and MODIS data	Yuri Knyazikhin	20

Poster session I

3:00 PM	Poster viewing and break	All	90
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Surface Remote Sensing and Modeling (continued)

4:30 PM	Progress and challenges in mapping forest and shrub canopies with MISR	Mark Chopping	20
4:50 PM	Ecological information in polarization measurements	Vern Vanderbilt	20
5:10 PM	Discussion	All	5
5:15 PM	Adjourn		

Social event

6:30 PM	La Cañada Flintridge Country Club
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Friday, December 12

Surface Remote Sensing and Modeling (continued)

8:30 AM	Angular and polarimetric signatures of vegetation at leaf and AirMSPI scales	Bin Yang	20
8:50 AM	pBRDF calculated for multiply reflected light with polarization ray tracing software	Christine Bradley	20
9:10 AM	Sample statistics of GroundMSPI pBRDF model fitting	Meredith Kupinski	20
9:30 AM	Discussion	All	5

Aerosols

Moderator: Mian Chin (GSFC)

9:35 AM	Convective cloud inhibition from anthropogenic fire aerosols in the tropics	Michael Tosca	20
9:55 AM	Adjoint inversion of atmospheric dust sources with MISR and MODIS observations	Richard Xu	20
10:15 AM	Break	All	20
10:35 AM	Comparison of MISR joint aerosol product with chemistry climate model output	Huikyo Lee	20
10:55 AM	What MISR can contribute to aerosol modeling for the next IPCC	Ralph Kahn	20
11:15 AM	Estimating ground-level PM _{2.5} using satellite remote sensing	Yang Liu	20
11:35 AM	Assessment of MISR vs. MODIS Collection 6 aerosol retrievals cf. Liu's predictions of street-level PM _{2.5} for London, Los Angeles, and Beijing	Jan-Peter Muller	20
11:55 AM	Discussion	All	5
12:00 PM	Lunch	All	90

Aerosols (continued)

1:30 PM	Modeling the association between ground-level PM and MISR AOD by size and type with application to a health effects study in LA	Meredith Franklin	20
1:50 PM	A new paradigm for constraining PM _{2.5} speciation by combining multiangular and polarimetric remote sensing with chemical transport model information	Olga Kalashnikova	20
2:10 PM	Entering the DRAGON's lair: Testing MISR high resolution aerosol retrievals with AERONET regional networks	Michael Garay	20
2:30 PM	Aerosols in the Southern Ocean	Marcin Witek	20

Poster session II

2:50 PM	Poster viewing and break	All	90
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Aerosols (continued)

4:20 PM	On the use of MISR, AirMSPI, and other field campaign data to investigate the role of aerosols and clouds on observed temperatures in the Southeast US	Felix Seidel	20
4:40 PM	Case studies of aerosol and water-leaving radiance retrieval using airborne multiangular/polarimetric measurements and a vector radiative transfer model	David Diner	20
5:05 PM	Discussion	All	5

Wrap-up

5:10 PM	Closing comments	David Diner	5
5:15 PM	Adjourn		

Posters

No.	Title	Lead author
1	Toward using MISR and OMI data to construct the volcanic emission amount and injection height for global model applications	Mian Chin
2	Observations from GO model inversions with MISR over forest in Oregon	Mark Chopping
3	Breakthrough in observation of fine-scale cloud top dynamics in polarized light with AirMSPI	Anthony Davis
4	The multi-dimensional challenge of validating remote-sensing aerosol-type retrievals	Ralph Kahn
5	Max-Planck-Institut tropospheric aerosol climatology (MAC) for radiative and microphysical properties	Stefan Kinne
6	MISR AOD 'scores' against other AOD data from satellite remote sensing based on regional evaluations with AERONET and MAN	Stefan Kinne
7	Hot spot signatures of vegetation from MISR	Yuri Knyazikhin
8	MISR Research Aerosol Algorithm: Refinements for dark water retrievals and MISR calibration corrections for high-contrast scenes	James Limbacher
9	Observed changes in cloud cover from MISR and MODIS over the Southern Oceans	Roger Marchand
10	Forecast impact of MISR wind observations	Kevin Mueller
11	Application of super-resolution restoration to MISR multi-angle data	Jan-Peter Muller
12	QA4ECV - one year on: Assessment of MISR albedos for 12 years using GlobAlbedo results	Jan-Peter Muller
13	A long time series assessment of cloud fraction from MISR, MODIS, MERIS, and VEGETATION using the ASTIC at CFARR	Jan-Peter Muller
14	The use of satellite-measured AOD to constrain biomass burning aerosol emissions in the GOCART model	Mariya Petrenko
15	Updates on AirMSPI and AirMSPI-2 instrument status, calibration, field campaigns and potential Level 2 data products	Felix Seidel
16	Optical polarization of light from a sorghum canopy measured under both a clear and an overcast sky	Vern Vanderbilt
17	Flowering development stage in sorghum estimated from optical polarization data	Vern Vanderbilt
18	Is there spectral variation in the polarized reflectance of leaves?	Vern Vanderbilt
19	Exploring the usefulness of MISR-HR products to estimate maize crop extent and using field evidence to evaluate the results in South Africa's Free State province	Michel Verstraete
20	Comparisons of MISR cloud motion vector (CMV) products and analysis/reanalysis data for bad orbits	Dong Wu
21	Approximate Bayesian computation on MISR aerosol retrieval	Shijing Yao
22	Indirect cloud effects from biomass burning smoke in the Arctic	Lauren Zamora